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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,186	02/26/2002	Akira Kimura	SON-2356	4346

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EXAMINER
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SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
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2137

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/082,186	<b>Applicant(s)</b> KIMURA, AKIRA	
	<b>Examiner</b> Kevin Schubert	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 35-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24, 35-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

Claims 1-24 and 35-46 have been considered.

***Claim Rejections - 35 USC § 103***

5           The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

10           (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15           Claims 1-9,13-21, and 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky, U.S. Patent No. 5,880,769, in view of Schneier (Schneier, Bruce. Applied Cryptography. John Wiley & Sons. 1996. pages 33-34).

          As per claims 1,13, and 35, the applicant describes a portable terminal with the following limitations which are met by Nemirofsky in view of Schneier:

20           a) first identification information storage means for storing a first identification information for discriminating said portable card terminal, said first identification information comprising a portable card terminal identifier that uniquely identifies the portable card terminal (Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34);

25           b) operating means for inputting a second identification information associated with said first identification information (Nemirofsky: Col 4, line 50 to Col 5, line 15);

30           c) communication means for communication with said authentication device wherein said communication including transmitting the first identification information from the portable card terminal to the authentication device, and receiving encryption key information from the authentication device in response to transmitting the first identification information (Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34);

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d) encrypting means for encrypting the second identification information input by said operating means based on said encryption key information received from said authentication device, wherein said encryption key information is generated by the authentication device in response to receiving the first identification information from the portable card terminal (Nemirofsky: Col 4, line 50 to Col 5, line 15;

5 Schneier: pages 33-34);

Nemirofsky does not disclose encrypting based on an encryption key received from an authentication device. Schneier discloses that a key may be transferred to an entity in order to establish secure communication. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with those of Nemirofsky and transfer an encryption

10 key for the purpose of establishing secure communication.

As per claims 2-7,9,14-19,21,36-40, and 42, the applicant describes the portable terminal of claim 1 (etc), which is met by Nemirofsky in view of Schneier, with the following limitations which are met by Nemirofsky:

15       Wherein the portable terminal is issued to said service user by a service provider to offer preset services for said service user in a credit sale system, an inter-account instant payment system and E-commerce carried out over a preset network and is in the form of a card (Nemirofsky: Col 4, line 50 to Col 5, line 15).

20       As per claims 8,20, and 41, the applicant describes the portable terminal of claim 4 (etc), which is met by Nemirofsky in view of Schneier, with the following limitation:

Wherein said second identification information stored in said transient storage means is erased every preset time interval;

Nemirofsky in view of Schneier do not appear to disclose erasing the information every preset

25 time interval. Examiner took official notice in a previous action that the idea of erasing information every preset time interval is well-known in the art. Examiner has taken Applicant's lack of rebuttal as an implicit admission that the concept is well-known in the art (See MPEP 2144.03 [R-1]). It would have been

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obvious to one of ordinary skill in the art at the time the invention was filed to erase information every preset time interval in order to free memory space.

Claims 10-12,22-24, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
5 Nemirofsky in view of Schneier in further view of Lillibridge, U.S. Patent No. 6,195,698.

As per claims 10-12,22-24, and 43-46, the applicant describes describes an authentication system with the following limitations which are met by Nemirofsky in view of Schneier in further view of Lillibridge:

10 a) first identification information storage means having the first identification information stored therein for discriminating said portable terminal, said first identification information comprising a portable card terminal identifier that uniquely identifies the portable card terminal (Lillibridge: Col 3, line 12 to 28, Fig 4; Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34);

15 b) operating means including display means for irregularly displaying letters included in a group of letters and selection means for selecting the letters making up the second identification information from among the letters irregularly displayed on said display means, said operating means inputting the second identification information associated with said first identification information (Lillibridge: Col 3, line 12 to 28, Fig 4; Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34);

20 c) first communication means for communication with said authentication device, wherein said communication includes transmitting the first identification information to said authentication device and receiving said encryption key information from the authentication device in response to transmitting the first identification information (Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34);

25 d) second identification information storage means having the first identification information and the second identification information stored therein (Lillibridge: Col 3, line 12 to 28, Fig 4; Nemirofsky: Col 4, line 50 to Col 5, line 15);

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e) encryption key generating information generating means for generating said encryption key generating information, wherein said encryption key information is generated in response to receiving the first identification information from said portable terminal (Schneier: pages 33-34);

f) second communication means for communication with said portable terminal (Nemirofsky: Col 4, line 50 to Col 5, line 15);

g) comparator authentication means for comparing the second identification information encrypted by said encryption means to said encryption key generating information by way of authentication (Nemirofsky: Col 4, line 50 to Col 5, line 15);

h) said portable terminal encrypts the second identification information input from said operating means, based on said encryption key generating information received from said authentication device through said first communication means, and the so encrypted second identification information is transmitted through said first communication means to said authentication device, and wherein, in said authentication device, the encrypted second identification information received through said second communication means and the second identification information stored by said second identification storage means are compared to each other based on said encryption key generating information by way of performing the authentication (Nemirofsky: Col 4, line 50 to Col 5, line 15; Schneier: pages 33-34).

Nemirofsky does not disclose encrypting based on a preset encryption key received from an authentication device. Schneier discloses that a key may be transferred to an entity in order to establish secure communication. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Schneier with those of Nemirofsky and transfer an encryption key for the purpose of establishing secure communication.

Nemirofsky in view of Schneier does not disclose irregularly displaying letters in a group of letters and selection means for selecting the letters making up the second identification information from the letters irregularly displayed. Lillibridge discloses this idea. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Lillibridge with those of Nemirofsky in view of Schneier because doing so makes the system more secure by making the system less prone to an automated attack.

***Response to Arguments***

The new title has been considered and is acceptable.

5           Applicant's argument with respect to the 103(a) rejection of claim 1 under Nemirofsky in view of Schneier, have been fully considered and they are persuasive. However, a new ground(s) of rejection has been made based on another passage of Schneier. The new rejection has been applied accordingly.

***Conclusion***

10           Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

15           A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20           Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

25           If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
5 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10 KS

  
**EMMANUEL L. MOISE**  
SUPERVISORY PATENT EXAMINER